



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,071	04/08/2004	Daniel J. Fisher	59554US002	9195
32692 7590 02/01/2008 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EXAMINER MULLER, BRYAN R	
			ART UNIT	PAPER NUMBER
			3723	
			NOTIFICATION DATE	DELIVERY MODE
			02/01/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LegalUSDocketing@mmm.com  
LegalDocketing@mmm.com



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
www.uspto.gov

ED

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/821,071  
Filing Date: April 08, 2004  
Appellant(s): FISHER, DANIEL J.

MAILED  
FEB 02 2008  
GROUP 3700

David B. Patchett  
Attorney  
For Appellant

**SUPPLEMENTAL EXAMINER'S ANSWER**

This is in response to the Reply brief filed November 20, 2007 providing additional arguments to the Examiner Answer mailed September 20, 2007.

### **Response to Argument**

All rejections of the claims and responses to previous arguments made in the Examiner's Answer mailed on September 20, 2007 are incorporated by reference herein.

In response to the additional arguments made by the appellant in the Reply Brief filed on November 20, 2007:

### **I. FIRST GROUNDS OF REJECTION**

The appellant has argued that the Examiner appears to agree with the argument made by the appellant regarding the rejection of independent claim 28, and claims 29-32 that depend thereon, as being anticipated by the Kleemeier (3,527,001) reference that Kleemeier does not teach co-planar attachment and non-attachment surfaces. However, the Examiner clearly does maintain the rejection based on the fact that Kleemeier reads on all of the claim limitations of claims 28-32. As indicated by the Examiner in the rejections of claim 28 (pages 3 and 4 of the Examiner's Answer) and the response to arguments regarding the rejection of claim 28 (pages 13 and 14 of the Examiner's Answer), the **claimed** limitations clearly read on the structure disclosed by Kleemeier. Specifically:

“the Kleemeier reference clearly reads on the claimed subject matter that “the second major surface (14 of Kleemeier) includes an attachment surface (still face of 14) including attachment material (the attachment material is the fibers 16 and 17) for attaching said

conversion pad with an abrasive article (20) and a non-attachment surface (outer circumferential edge of the same surface of layer 14)". Therefore, the "attachment surface" of Kleemeier, which has attachment material, is clearly defined at the surface of layer 14, which is also clearly co-planar with the non-attachment surface" (last line of page 13 through line 7 of page 14 in the Examiner's Answer).

This description refers to the non-attachment surface, which is defined at the outer circumference of layer 14, and the attachment surface is defined by the entire length of the fibers 16 and 17, which clearly form a surface at their attachment point to layer 14 that is co-planar with the non-attachment surface. At no point does the Examiner agree that Kleemeier fails to disclose co-planar attachment and non-attachment surfaces. The Examiner's assertion relating to the claims not reading on the elected species is only in response to the appellant's attempt to define the "attachment surface" as being "defined by the terminal ends of the fibers" in the first paragraph on page 9 of the Appeal Brief filed on June 18, 2007. However, the **claimed** limitations of claim 28 *do not* define the attachment layer as only being the terminal ends of the fibers. Thus, any portion along the entire length of the fibers may read on the "attachment surface" as claimed, and the Kleemeier reference will therefore anticipate the **claimed** limitations, as described by the Examiner in the Examiner's Answer.

The appellant's further arguments regarding the species election requirement issued on October 4, 2005 (paragraphs 2 and 3 under the First Grounds of Rejection) appear to be arguing the propriety of the election requirement, which is a petitionable matter, not an appealable matter. Again, as indicated by the Examiner, the Kleemeier

reference anticipates claims 28-32, thus the arguments referring to the election requirement appear to be irrelevant to the Appealed rejection of the claims.

## **II. SECOND GROUNDS OF REJECTION**

The appellant argues that Kleemeier fails to teach a "conversion pad" for attaching an abrasive article to a back-up pad of a sanding tool, as argued in the appellant's appeal brief (paragraph 2 on page 11 of the Appeal Brief filed on June 18, 2007). In response, the Examiner references the response to the same argument made in the Examiner's Answer, dated September 20, 2007, reading:

"The appellant defines a conversion pad as "a pad for accommodating abrasive discs with different attachment systems". However, as discussed, the Examiner indicated either layers 13, 14 and 15 as the conversion pad or layers 14 and 15 [of Kleemeier] alone as the conversion pad. In both cases the upper most layer (13 or 14 respectively) are attached to the next uppermost layer using adhesive, which is inherently removable, while the lowermost layer (15 in both cases) provides a mechanical hook type fastener, thus accommodating an abrasive disc having a mechanical loop type fastening system to attach to a layer (12 or 13, respectively) that does not have a mechanical loop type fastening system. Therefore, either section of Kleemeier that is considered by the Examiner to be the conversion pad does function exactly as the appellant defines a conversion pad." (lines 2-12 on page 15 of the Examiner's Answer)

Thus, the appellant's limitation of a "conversion pad" is merely intended use of the claimed structure and the structure of Kleemeier (or combination of Kleemeier and Edinger) reads on all of the structure of the claims in question and is capable of use as a "conversion pad".

The appellant further argues that the limitation of claim 1, that defines the non-attachment region as "forming an attachment...that is weaker than the attachment between the attachment region and the associated mating surface" and thus requires "more than a complete absence of attachment material" and "must be capable of forming an attachment with the abrasive article, but at a reduced or weaker level" (lines 10-12 in the SECOND GROUNDS OF REJECTION section of the reply brief filed on November 20, 2007). However, referring to the elected species for the non-attachment region as being defined by attachment material (hook or loop fasteners) that has been altered to inhibit attachment (claimed in claims 8 and 33). The appellant's specification defines the altering of the attachment material as being "removed, bent, crushed, melted, or otherwise altered to **prevent** attachment" (Lines 23-27 on page 4 of the specification) and claim 9 claims that the fastening elements are bent to **prevent** attachment, wherein removing of the attachment material will clearly provide a complete absence of attachment material and other alteration that "prevents attachment" will clearly fail to provide any attachment at all. Further, claim 13, which depends on independent claim 1, defines the non-attachment region as being "free of attachment material". Therefore, in the limitation that the non-attachment region is "for forming an attachment...that is weaker", the "weaker attachment", as acclaimed, does not require any attachment and may include a complete absence of material, as disclosed by the appellant in the specification and claimed in claims 9 and 13. Thus, the non-attachment region of Kleemeier does read on the appellant's claimed non-attachment region as defined by the appellant in the specification and in the dependent claims.

### III. THIRD GROUNDS OF REJECTION

The appellant further argues that the Long reference is non-analogous. Appellant has previously made the same argument (page 13 of the Appeal Brief filed June 18, 2007) and the Examiner again will refer to the response to the argument as included in the Examiner's Answer mailed on September 20, 2007, that reads:

"The appellant also argues that the combination is improper because the Long reference is non-analogous art to the Kleemeier reference. The appellant even cites the position of the Federal Circuit that "A reference is reasonably pertinent if...it is one which, because of the matter with which it deals, logically would have commended itself to the inventor's attention in considering his problem...If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem". The appellant further stresses that it is necessary for the reference to relate to the same problem that the inventor of the current application is concerned with. In this case, the sole purpose for the inventor to provide the non-attachment section of the conversion pad is to make it easier for a user to grip one of the sides being held by the attachment system to remove the layers from one another, as is indicated repeatedly in the specification that "the connection between the non-attachment region and the and the associated mating surface is preferably sufficiently weak to allow a user to manually grasp the abrasive article in the area adjacent the non-attachment region and separate the abrasive article from the sanding tool" (first occurrence in lines 3-6 on page 3 of the specification). Thus it is clear that the Long reference relates to the exact same problem as the problem that the appellant is attempting to overcome by providing the non-attachment region, making the Long reference pertinent prior art. Further, the recent KSR decision cites a Teaching, Suggestion or Motivation (TSM) test that states that a patent claim is prima facie obvious if "some motivation or suggestion to combine the prior art teachings" can be found in the prior art, the nature of the problem, or the knowledge of a person having ordinary skill in the art. In this case, the Long

reference clearly indicates that the bending of hook-type fasteners will make it easier for a user to remove one layer from another that are attached using the hook and loop type fasteners, which is the nature of the problem that the appellant is intending to solve, thus, clear motivation is provided in the prior art." (pages 16 and 17 of the Examiner's Answer)

The appellant further argues that Kleemeier teaches away from using the altered fastening elements for the non-attachment region because Kleemeier specifically discloses a method of forming the pad that includes specific steps to prevent any material from being present in the non-attachment region. However, as discussed in the Examiner's Answer, forming the non-attachment region of Kleemeier from altered fastening elements will allow for easier production of the pad having a non-attachment region (lines 15-21 on page 9 of the Examiner's Answer from September 20, 2007). Therefore, as described in the rejection of claims 8 and 9 included in the Examiner's Answer, it would have been obvious to replace the method of forming the non-attachment region disclosed by Kleemeier with the method of forming the non-attachment region as disclosed by Long. Further, the Examiner asserts that a mere teaching of a specific method of production does not "teach away from" another method of production unless the reference specifically cites that the other method is undesirable for some reason.

#### **IV. FOURTH GROUNDS OF REJECTION**

Appellant refers to argument made in reference to the rejections of claims 8, 9 and 28 as also applying to claims 33 and 34. In response, all of the arguments made in



Art Unit: 3723

reference to the rejections of claims 8, 9 and 28, have been addressed above, or within the Examiner's Answer and thus, the rejections of claims 33 and 34 are also maintained by the Examiner.

## V. FIFTH GROUNDS OF REJECTION

The appellant argues that it would **not** have been obvious to modify Kleemeier to align the edges of layers 13, 14 and 15 in view of the arguments previously made in the Appellant's Appeal Brief and in view of the disclosure of Kleemeier that layer 13 must define and enhanced outer diameter to prevent wall damage. The appellant's previous arguments made in the Appeal Brief have already been addressed in the Examiner's Answer. In response to the argument that Kleemeier discloses that layer 13 must define and enhanced outer diameter to prevent wall damage. The appellant is referring to the disclosure of Kleemeier in Col. 4, lines 4-10 that the aluminum plate 12 is smaller in diameter than layer 13. Thus, the Kleemeier reference only requires that the diameter of layer 13 must be larger in diameter than plate layer 12, wherein claim 37 does not require that a plate layer also has an aligned outer edge, not does the Examiner assert that it would be obvious to align the outer edges of layers 12 and 13. There is no disclosure of Kleemeier that teaches away from layers 13, 14 and 15 having aligned outer edges, thus, the Examiner maintains the rejection of claim 37 that it would have been obvious to align the edges of layers 13, 14 and 15.

The appellant further argues that none of the secondary references (Ali, Edinger, Clemente and Manor) teach a system having separate, distinct back-up pad, conversion

Art Unit: 3723

pad and abrasive article components. However, the secondary references are merely provide to teach that it is known in the art to have multi-layer abrasive articles wherein all of the layers have aligned outer edges and the Kleemeier reference does disclose a system having separate, distinct back-up pad, conversion pad and abrasive article components. Thus, it is not necessary for any of the secondary references to disclose a system having separate, distinct back-up pad, conversion pad and abrasive article components for the obviousness rejection of claim 37, as included in the Examiner's Answer from September 20, 2007.

The appellant also argues, with regards to claim 41, that the claim requires the conversion pad to be removably connected to the back-up pad but Kleemeier discloses that the resin layer (14; indicated as the conversion pad) is not removably connected to the rubber layer (13; indicated as the back-up pad) because Kleemeier discloses that the resin layer is affixed to the rubber layer 13. However, Kleemeier discloses that layers 13 and 14 are adhered to one another by a pressure sensitive adhesive (18; Col 2, lines 41-48) wherein it is old and well known in the art that layers adhered to one another are removably attached, either by peeling the layers apart, melting the adhesive or applying chemicals to dissolve or weaken the adhesive to allow easy removal. Further, the definition of the term "affixed", as disclosed by Kleemeier, does not require any permanent attachment or teach away from removable attachment. Therefore, as indicated in the previous rejection of claim 41, in the Examiner's Answer, the back-up pad (layer 13) and the conversion pad (layer 14) of Kleemeier are inherently "removably connected" to one another.

## **IX. SIXTH GROUNDS OF REJECTION**

Appellant refers to argument made in reference to the rejections of claims 37, 8 and 9 as also applying to claim 42. In response, all of the arguments made in reference to the rejections of claims 37, 8 and 9 have been addressed above, or within the Examiner's Answer and thus, the rejection of claim 42 is also maintained by the Examiner.

### ***Conclusion***

Applicant's additional arguments filed in the Reply Brief on November 20, 2007 have been fully considered but they are not persuasive.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Bryan R Muller/

Examiner, Art Unit 3723

Conferees:

/Joseph J. Hail III/

Supervisory Patent Examiner

Art Unit 3723

/Derris H. Banks/

Supervisory Patent Examiner

Art Unit 3725